



Health Department

Tom Barrett
Mayor

Bevan K. Baker, CHE
Commissioner of Health

Vivian T. Chen, MSW, ScD
Health Operations Director

Family and Community Health Services

web site: www.milwaukee.gov/health

June 1, 2007

To: Milwaukee-area physicians and other health care professionals
Re: Multi Drug Resistant (MDR) Shigella Outbreaks within the City of Milwaukee

There has been a significant upsurge in the number of Shigella cases reported in the City of Milwaukee recently. In the month of May alone, the City of Milwaukee Health Department (MHD) received over 50 reports of Shigella, which is far above baseline rates. The majority of cases have been young children in childcare facilities, but adults working at the facilities and other caregivers have also been infected.

Shigellosis is a bacterial infection spread by eating or drinking contaminated food or water or by direct or indirect contact with fecal matter from an infected person. Symptoms may appear up to 7 days after infection, but usually begin between 1 to 3 days after exposure. Symptoms can include abdominal cramping, fever, and mild to severe diarrhea, often with traces of blood or mucous in the stool. Some infected (and infectious) people may be asymptomatic.

The MHD Laboratory and other local laboratories have conducted antimicrobial susceptibility testing on 48 recent isolates. Of those, 79% were resistant to ampicillin, 71% were resistant to trimethoprim-sulamethoxazole (TMP/SMX) and 63% were resistant to both ampicillin and TMP/SMX. Given these results, **MHD recommends that Milwaukee-area clinicians NOT use ampicillin/amoxicillin or TMP/SMX to treat Shigella.** Alternative medications to consider include erythromycin for pediatric patients and quinolones such as ciprofloxacin for adult patients with known or suspected Shigella infection. Azithromycin may be effective, but its very long elimination half-life makes it difficult to utilize follow up stool cultures to assess clearance of the organism.

The small number of bacteria required to transmit shigellosis make it easily spread person-to-person if adequate hand hygiene is not followed. Persons in high risk settings, such as child care facilities or health care facilities should be excluded from work or school until resolution of organism shedding has been documented by stool culture. Therefore, MHD recommends treatment of individuals in these high risk settings in order to minimize potential spread of the disease and reduce the length of the exclusion period.

Persons with mild Shigellosis who can reliably implement excellent hand hygiene and who are not in high risk settings do not necessarily need to be treated with antibiotics, because the disease is usually self-limited and because such persons do not pose a great risk of transmission to others.

Sincerely,

Geoffrey R. Swain, MD, MPH
Associate Medical Director
City of Milwaukee Health Department

Paul A. Biedrzycki, MPH, MBA
Manager, Disease Control & Prevention
City of Milwaukee Health Department

Think Health. Act Now!